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**UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

**INTERNATIONAL GOLDEN FOODS, INC.,  
an Illinois Corporation**

**VS.**

**09CV3101**

**JUDGE KENDALL**

**MAGISTRATE JUDGE KEYS**

**SYNGENTA CROP PRODUCTION, INC.,  
a Delaware Corporation; ANTHONY DIAZ, an  
individual; UNIVERSES NETWORKS, a non-registered  
business entity operating in Chicago Illinois,  
Cook County; ZENECA, LTD., a corporation of  
England, UK; ZENECA AG PRODUCTS, INC.,  
a Delaware corporation; INTERNATIONAL  
SERVICE FOR THE ACQUISITION OF  
AGRI-BIOTECH APPLICATIONS, a Maryland  
corporation; INTERNATIONAL RICE  
RESEARCH INSTITUTE, a corporation;  
CONSULTATIVE GROUP OF INTERNATIONAL  
AGRICULTURAL RESEARCH, a corporation;  
SWISS FEDERAL INSTITUTE OF TECHNOLOGY  
a business entity of Switzerland; INGO POTRYKUS  
an individual residing in Germany; PETER BEYER,  
an individual residing in Germany; and BUSINESS  
ENTITIES "A" through "G"; and JOHN DOES  
"1" through "10", individuals,**

**DEFENDANTS**

**FILED**

**MAY 22 2009 TC**

**5-22-2009**

**MICHAEL W. DOBBINS  
CLERK, U.S. DISTRICT COURT**

**COMPLAINT FOR TRADEMARK INFRINGEMENT,  
TRADE DISPARAGEMENT, UNFAIR COMPETITION  
PASSING OFF, FALSE ADVERTISING, CONVERSION, AND DILUTION**

Plaintiff International Golden Foods, Inc., (hereinafter "Plaintiff" or "Golden Foods"), by  
and through undersigned counsel, for its Complaint against defendants, Syngenta Crop

Production, Inc., a corporation of Delaware doing business in Illinois, County of Cook, as well as in DuPage County, Illinois, (hereinafter, "Syngenta") and the other named defendants, namely, Anthony Diaz, an individual residing in Chicago, Cook County, Illinois; Universes Networks, a business entity doing business in Chicago, County of Cook, Illinois; Zeneca Ltd., a corporation of London, England; Zeneca Ag Products, Ltd., a corporation of London, England; International Rice Research Institute, a business entity doing business in a variety of locations, including in the State of Illinois, and in the Country of the Philippines; the International Service for the Acquisition of Agri-biotech Applications, a Maryland Corporation, which does business in the State of Illinois; Swiss Federal Institute of Technology, a business entity of Switzerland; Ingo Potrykus, an individual whose business conducted with the Golden Rice Project does business within the State of Illinois, Peter Beyer, an individual whose business conducted with the Golden Rice Project does business within the State of Illinois; other individuals including Anthony Diaz, a resident of, and doing business in the City of Chicago, County of Cook, individually or as "Universes Network"; Ingo Potrykus, an individual residing in Germany, Switzerland, or in the Phillipines, and is associated with "The Golden Rice Project"; and various business entities to be named at a later date ("Business Entities "A" through "G""), who were involved in acquiring the domain name 'goldenrice.com' at the moment it was to be renewed, then offered it for sale to the Defendants, or one of them, some of them, or many of them; and, various individuals to be named (Individual "John Does "1" through "8""), who were involved in the removal of the domain name 'goldenrice.com' from the ownership and control of the Plaintiff Golden Foods and transferring it to Syngenta, the Golden Rice Project, or other business entity to be later named, or to other individuals, or all of the Defendants, or some of

them or all of them, and states as follows:

**BACKGROUND OF THE COMPLAINT**  
**AS REGARDS THE TRADE NAME AND TRADEMARK**  
**GOLDEN RICE AND INTERNATIONAL GOLDEN FOODS**

1. This is an action for trademark infringement under the Lanham Act, 15 U.S.C. § 1051 et seq.; 1501 U.S.C. § 1125(a); unfair competition; passing off, false advertising, false designation of origin of a famous mark under the Lanham Act, 15 U.S.C. § 1125(c), arising from Defendant's use of Golden Foods' famous trademark GOLDEN®, and its use of trade names and trademarks of "Golden Rice", in connection with genetically modified rice, common law trademark infringement, trademark misuse; common law false designation of origin, tarnishing of trademark value under Illinois law common law and the Lanham Act, misappropriation of web address, fraudulent conveyance of web address; and damage to the reputation and good will of International Golden Foods, Inc.
2. Golden Foods has used the mark GOLDEN® in interstate commerce in connection with a variety of rices, continuously and without interruption, since a date as early as July 1, 1986.
3. Golden Foods has used the mark GOLDEN RICE™ in connection with long grain parboiled white rice, and with other varieties of white rice, since 1986, i.e., in interstate commerce since at least July 1, 1986
4. Golden Foods had first used the web address "goldenrice.com" since a date of at least July 22, 1998.
5. The product names, common law trademarks, and trade names of GOLDEN RICE™ and GOLDEN® rices have become famous in the food and grocery trade and has become

identified with Golden Foods.

6. Customers purchasing GOLDEN RICE™ readily identify the product, which is long grain white parboiled rice with Golden Foods. They also identify GOLDEN RICE™ as one member of the line of Golden Foods' GOLDEN® products, which are of consistently high quality with a reputation for purity, cleanliness, and with rices that are conventionally grown.
7. The trade name and trademark GOLDEN RICE, is also used by customers of Golden Foods when referring to the wide variety of white rices sold under Golden Foods' GOLDEN® trademark registration, US Trademark Registration Number 2,122,597 [the '597 registration].
8. Golden Foods sells long grain white rice, long grained white parboiled rice, Basmati rice, Jasmine rice, short grain white rice, and other rices under its '597 GOLDEN® registration.
9. Golden Foods worked with a variety of persons and companies, including Anthony Diaz, (possibly doing business as "Universes Networks, Inc.", which is a non-registered business entity, doing business in Chicago, Illinois, and on the Internet with business activities within the City of Chicago and in interstate commerce on the Internet.
10. Mr. Diaz, individually and/or through his business identity, was under contract to obtain, establish and maintain the business address of Golden Foods' rice business under the domain name "goldenrice.com", which activities were performed under a contract between Mr. Diaz and his company, Universes Networks..
11. On information and belief, at some point,, an unknown business entity (From the group of

defendants Business Entities "A" through "G" and/or individual John Does "1" through "8"), working with Mr. Diaz, or on their own volition, caused or participated in, the diversion (transfer) of the domain name "goldenrice.com", alone or with the domain name "goldenrice.org," and other permutations of the domain name including the web address identifier of "goldenrice", to be removed from Golden Foods control, and transfer of that (those) domain names to others, such as Defendants Syngenta, The Golden Rice Project, Potrykus, Beyer, and/or other named Defendants, and/or Business Entities "A" through "G" and/or individual John Does "1" through "8".

12. In late 2007, Golden Foods learned that the domain name 'goldenrice.com' had been transferred to The Golden Rice Project.
13. Also, during a period extending from 2000 to present, Defendant International Service for the Acquisition of Agri-biotech Applications, a Maryland corporation, has acted on behalf of The Golden Rice Project and or its other affiliates or sponsors, and/or other named Defendants Syngenta, Zeneca, and/or Business Entities "A" through "G" and/or individual John Does "1" through "8", and applied for the trademark registration for GOLDEN RICE, and/or variations on that mark, in the United States Patent and Trademark Office on behalf of Syngenta Crop Products, Inc., The Golden Rice Project, Ingo Potrykus, Peter Beyer, Zeneca Ltd., Zeneca Crop Products, the Consultative Group of International Agricultural Research, and/or other business entities herein named Business Entities "A" through "G", John Does "1" through "8", or all of them or some of them.
14. Review of the file wrappers of the applications for trademark registration in the United

States Patent and Trademark Office show that the foregoing individuals are or were involved in the applications, but the files are not complete as held in the Trademark Office. Thus, determining the extent of activity in seeking the foregoing mentioned registrations, is ongoing.

15. Plaintiff International Golden Foods, Inc., is an Illinois corporation with a principle place of business at 819 Industrial Drive, Bensenville, IL 60106. Golden Foods sells a wide variety of white rices, including Basmati, long grain white rice, short grain white rice, and parboiled rice. The rices sold by Golden Foods are sold under its US Trademark Registrations, including the GOLDEN® trademark (the '597 mark), its Illinois State Trademark Registration for GOLDEN RICE, and under its trademark GOLDEN RICE™. The rices sold by Golden Foods are referred to by customers, consumers and distributors as "GOLDEN RICE". (See Exhibits A, B, and C hereto.)
16. Defendant Syngenta is a Delaware Corporation with offices at 510 Swing Road, Greensboro, NC 17409. The corporation is affiliated with Syngenta AG, of Switzerland.
17. Defendant Golden Rice Project is on information and belief, a part of , or subsidiary of Syngenta Crop Production, Inc., and/or of Syngenta, AG.
18. Defendants Potrykus and Beyer are the inventors of the patented process for genetically modifying rice so as to produce a brightly yellow rice germ plasm or rice seed, and formed, with others of the above named defendants, or with unnamed Business Entities "A" through "G", or John Does "1" through "8", in publicizing rice that is under development, and which rice is neither sold nor marketed in the United States or in any country, which they refer to as "Golden Rice".

**THE GOLDEN RICE PROJECT**

19. In or about 2001, plant geneticists Ingor Potrykus and Beyer, invented a seed line comprised of a transgenic, Genetically Modified Organism, namely a rice of the japonica variety, that combines genetic material from crocus, the cauliflower mosaic virus, and bacterial genetic material. This rice is alleged to contain Vitamin A within the endosperm of the rice grain, which rice ordinarily does not contain.
20. This transgenic rice, a Genetically Modified Organism, has a bright yellow color. The yellow color results from the presence of non rice, or non rice species specific genetic material, which is believed responsible for the rice having the capability to generate carotenoids, or Vitamin A precursors in its endosperm. While rice plants would never cross, or reproduce when crossed with non-rice species, the transgenic rice contains non-rice specific genetic material, namely genetic material from the crocus plant, the cauliflower mosaic virus, and bacterial genetic material within the genetic material in the nucleus of the rice cells. This implantation of genetic material foreign to the rice genome is achieved, through the use of transgenic procedures and genetic modification. The resultant rice then incorporates parts of the crocus genome. Also, in the creation of the transgenic, genetically modified rice, steps are taken that impart antibiotic resistance, which is not related particularly to the creation of Vitamin A in the rice, but is used to ensure that the genetic modification desired has taken place during the process of creating the rice seed in the plant laboratory.
21. Following this invention work, Potrykus and Beyer established the Golden Rice Project, which is ostensibly a humanitarian project dedicated to the dissemination of the

Genetically Modified Rice containing genetic material from bacteria, and from viruses, for the purpose of causing this rice to be grown in areas where persons are dependent upon rice for a majority of their daily caloric intake, and in which areas, there is a problem of diets lacking in nutrients, and a lack of with Vitamin A in diets.

22. Transgenic rice inventors Potrykus and Beyer saw the bright yellow color of their research product, transgenic rice, which they used as their “inspiration” for descriptively, even merely descriptively, naming this transgenic, Genetically Modified rice “Golden Rice”, according to public statements made by Peter Beyer.
23. Inventors Potrykus and Beyer applied for patents on the rice, which patents have been, or are to be, assigned to a variety of business organizations, foundations, research foundations, corporations, including but not limited to, the Institution for Rice Research, Syngenta Crop Production Inc., Zeneca Ltd., Zeneca Products, Inc., International Service for the Acquisition of Agri-Biotech Applications, Consultative Group of International Agricultural Research, the Swiss Federal Institute of Technology, and other business entities “A” through “G”, and possibly other individuals, including “John Does”, including but not limited to, “John Doe 1” through “John Doe 8”.
24. Defendant Syngenta, as Syngenta Crop Production, Inc., acquired the rights to the patent pertaining to this transgenic Genetically Modified rice, and commenced upon a program to conduct testing, including field testing, in a variety of locations. To date, it is unknown if any of these tests have been conducted.
25. Defendant Syngenta either funded the Golden Rice Project “goldenrice.com” web site, or acquired the website having the web using the identifier of “goldenrice”, based upon



information available from that website, and from statements in press accounts of the history of the Golden Rice Project. Syngenta also launched additional web sites having addresses containing the web address information of “goldenrice”, such as goldenrice.org, goldenrice.com, and goldenrice.info.

26. Additional sites have been launched by the defendants, or some of them, using the domain names, “goldenrice.com”, “goldenrice.org”, and “goldenrice.info”, “goldenrice.de.com”, “goldenrice.eu”, and “goldenrice.co.uk”.
27. Defendant Syngenta is listed as the sole entity for all licensing of any seed resulting from the Golden Rice Project development of the transgenic, Genetically Modified Rice that was named ‘golden rice’ due to its bright yellow color. See: printout of Defendant’s web site, Exhibit A hereto, and incorporated by reference herein.
28. The Golden Rice Project, having named the rice due to it’s yellow color, caused by the presence of carotenoid, or Vitamin A precursor, conducted field tests in 2004 in Louisiana, in conjunction with Louisiana State University. This history has been set forth in many publications, in addition to the Golden Rice Project web site.
29. As a result of the publicity generated about this transgenic genetically modified rice labeled by The Golden Rice Project as “golden rice”, distributors and customers of Golden Foods have become frightened at the prospect of genetically modified rice being included with the rice sold by Golden Foods. As Golden Foods sells many varieties of rice under its GOLDEN® trademark, these rices are known collectively as Golden Rice, in addition to its parboiled rice, sold under the trade name GOLDEN RICE™.

#### **JURISDICTION AND VENUE**

30. This Court has jurisdiction over the subject matter of this action pursuant to 15 U.S.C. § 1121 and 18 U.S.C. § 1338(a) and (b). In rem jurisdiction over the trademark and web site address domain names is appropriate pursuant to 15 U.S.C. § 1125 (d)(2) and under Illinois law. Defendants have done business within the state of Illinois, and personal jurisdiction is proper under the Illinois long arm statute, 735 ILCS 2/209. Venue is proper in this district pursuant to 28 U.S.C. § 1391 (b)(2).

**THE GOLDEN FOODS TRADEMARKS**

31. The products known as GOLDEN RICE™ and sold under the GOLDEN® trademark, including a variety of rices, are well known in the food marketplace.
32. Golden Foods has been in business since 1986, and has sold rices and a wide variety of foods under its GOLDEN® trademark.
33. The trademark GOLDEN® (Reg. No. 2,122,597), for, among other things, rice, is registered with the United States Patent and Trademark Office, and affidavits under sections 8 and 15 of the Lanham Act have been filed and accepted, particularly as applies to the mark GOLDEN as applied to rice . (Exhibit A)
34. Golden Foods also is the owner of the trademark and trade name GOLDEN RICE™, filed July 30, 2008, with the US Patent and Trademark Office in Class 30, for rice. That application is currently live and under examination in the US Patent and Trademark Office under Serial Number 77534915 (Exhibit C.)
35. Golden Foods also has a State Trademark Registration in Illinois dating from 9 October 1986 for the mark GOLDEN RICE®, a copy of which mark is attached hereto as Exhibit B.

36. The certificates of registration identified in paragraphs 32, 33 and 34, are *prima facie* evidence of the validity of the registrations, the Registrant's ownership of the marks, and the Registrant's exclusive right to use the marks in commerce in connection with the goods and services specified in the certificates of registration under the provisions of the Lanham Act.
37. Golden Foods has advertised its many rice and non-rice food products under the GOLDEN® brand for over twenty years. As a result, much of the Golden Foods line of GOLDEN® rices have become known as GOLDEN® RICE. In addition, Golden Foods has sold parboiled rice under the mark GOLDEN RICE™. The result has been that virtually all rices sold by Golden Foods have become known in the communities where they are sold, as "GOLDEN RICE™".
38. The lifeblood of any food purveyor is the purity and quality of the food products offered for sale. Golden Foods has always operated its business by selling only the very best quality, highest purity, most safe, and most pure foods. As a matter of policy, Golden Foods does not sell, offer or promote any foods that are adulterated, or where there are problems in quality from its suppliers.
39. Grocers, food distributors, marketers, vendors, and even consumers, are becoming more aware of, and more interested in, the origin of the foods they sell, purchase and consume. Golden Foods has a long history of carefully vetting the origin of all products it sells for purposes of assuring high quality, and healthfulness of the food it sells and distributes.
40. As a result of Golden Foods vigilance, the reputation of Golden Foods is excellent, both within the food vendor community (including chain grocery stores, big box stores,

independent grocers, convenience shops, fruit and vegetable stores, and institutional customers such as hospitals, schools, and restaurants). This reputation has been carefully built over the past decades, where grocers, vendors, distributors, and customers are assured that when asking for any product bearing the GOLDEN® mark is assured that the product inside the package will be the very best.

41. At no time in the past has Golden Foods sold any rice containing any Genetically Modified Organisms, i.e., rice. In addition, Golden Foods in fact has a policy of never knowingly selling any products containing any Genetically Modified food ingredients of any sort.
42. Golden Foods has advertised in many outlets, including newspapers, store flyers, brochures, and on the Internet, along with radio and television mentions. As a result, Golden Foods' GOLDEN RICE™ and Golden Foods line of GOLDEN® rices are well known and famous.
43. Golden Foods' GOLDEN RICE™ and Golden Foods line of GOLDEN® rices are also well known in ethnic markets, which on information and belief, serve the food needs of tens of millions of persons in the United States, and in markets catering to consumers seeking high quality, reasonably priced rices and other foodstuffs.
44. Substantial amounts of money have been expended since the inception of Golden Foods in development of markets and outlets for its GOLDEN® rices, and in developing and expanding its markets for GOLDEN RICE™. Golden Foods has spent at least \$400,000, and possibly over \$500,000, in advertising its GOLDEN RICE™ alone. The sales of Golden Foods GOLDEN RICE™ now exceed several million dollars, per year.

45. Golden Foods' GOLDEN RICE™ and its line of GOLDEN® rices represent product lines are growing in notoriety and customer loyalty. Golden Foods is also expanding its market share in North America, and is expanding in Europe, South America, the Middle East, and Asia.
46. As a result of the expenditures of effort, diligent attention to healthful purity and safety of products, careful monitoring to avoid any rices with undesirable pesticide contamination, contaminants, or artificial dyes, colors or other materials, GOLDEN RICE has acquired a loyal customer base, high consumer recognition in the minds of the relevant public, and the name GOLDEN RICE is associated with tremendous goodwill. The GOLDEN RICE™ and GOLDEN® rices have become assets of incalculable value as flagship products of Golden Foods.
47. The Defendants, by publicizing a product under development for marketing to third world nations, have caused actual confusion for some Golden Foods customers. The Defendants are not able to sell their product, but by their actions, have caused many consumers to be of the impression that The Golden Rice Project's "Golden Rice" is associated with, endorsed by, or sold by Golden Foods as its GOLDEN RICE™.
48. Defendants, by their action of using the name "Golden Rice" for their rice have caused the public to assume some affiliation, endorsement, or quality assurance and association between Golden Foods' GOLDEN RICE™ and the Syngenta, Golden Rice Project's "Golden Rice".
49. Customers of Golden Foods have complained that they are wary of purchasing Golden Foods' GOLDEN® rices, including Golden Foods GOLDEN RICE™, because they fear

there may be Genetically Modified rice within the packages. This has caused a loss of sales, or slower growth of sales than would be expected based upon the growth of other rice products sold by Golden Foods. In certain areas, some customers have instituted short term boycott against Golden Foods entire GOLDEN® rice product line, with special attention to boycott of GOLDEN RICE™, as well as some distributors cancelling orders, or cutting back on orders, justifying their actions by stating customers have complained to them that, “if Golden Foods would put Genetically Modified rice into its food line, they cannot be certain that the rest of the Golden Foods line of products is not tainted, or might be harmful.”

50. To date, there is no current authority for the marketing or selling or consumption of Genetically Modified Rice by humans in the United States. Europe has tightened its regulations, and has restricted the importing of Genetically Modified Foods. The Media and Press, both mainstream and online, regularly cover the issue of safety of Genetically Modified Foods, and this coverage often cites as a model for promotion of these transgenic, Genetically Modified foods, the very rice that Defendants have named “golden rice”. In the past six months, these press accounts have caused confusion in the minds of purchasers of GOLDEN® rices, and fears that these rices from Golden Foods might contain Genetically Modified Foods where there have not been any long term, longer than ten year, tests of food safety.
51. In 2004, there was Genetically Modified rice contamination of rice grown in Louisiana. This caused a recall of all rice packaged that may have contained Genetically Modified Rice, and caused the Rice Industry to lose up to \$2 Billion in that year alone. Similarly,

there have been recalls of food products made with flour contaminated by Genetically Modified grains. Those recalls also cost the food industry hundreds of millions of dollars.

52. Golden Foods obtains its rice only from reputable growers, including growers in Louisiana and Texas in the US, and from growers in other parts of the world for its specialty rices, such as Basmati and Jasmine rice varieties. These various rices are packaged as GOLDEN® Rice Basmati Rice, GOLDEN® RICE - Long Grain, GOLDEN® RICE Medium Grain Rice, and GOLDEN RICE™ Parboiled Rice. GOLDEN RICE™ Parboiled Long Grained White Rice is a rice that has been processed slightly to render it more quick cooking than other rices, and is perhaps the most famous of the Golden Foods GOLDEN RICE™ products and GOLDEN® RICE products and its GOLDEN® products..
53. Persons interested in the quality of rice sold by Golden Foods have informed it that the wide publicity concerning the 2006, the US Department of Agriculture, (USDA) recall of all rice due to Genetically Modified Rice also caused a drop in rice sales for rices from areas where there was no contamination due to Genetically Modified Rice at all, showing that consumers were concerned about the effect of this recall upon the safety of rice sold by rice vendors generally. Golden Foods GOLDEN RICE™ was singled out for particular attention due to the press coverage of the Defendant's "Golden Rice". Customers have cited this recall and GM contamination event for one reason they believe Golden Foods is selling GM tainted rice in its GOLDEN RICE, and GOLDEN line of rices.

54. Customers, distributors, marketers and members of the public have informed Golden Foods that, due to the information they receive about Genetically Modified rice, and fears of contamination of their food supply by Genetically Modified Organisms, they distrust any product in the GOLDEN® lines, including canned vegetables, pickles, canned legumes, and the like. They have stated that if Golden Foods would package transgenic, or Genetically Modified food into the GOLDEN RICE, or GOLDEN rices, they cannot trust the food that is otherwise packaged for sale and human consumption, thus tainting the entire product line of Golden Foods.

#### **DEFENDANT'S WRONGFUL CONDUCT**

55. Defendant's entire concept of naming its transgenic Genetically Modified Rice as "Golden Rice" was based upon its wholesale appropriation of that name "Golden Rice", from the Plaintiff Golden Foods.
56. The very name selected for this transgenic, brightly yellow colored , rice was the merely descriptive, Golden Rice for a bright yellow grain created through gene splicing, transgenic methods, an entirely non-natural breeding processes. In doing so, Defendant seeks to trade from the good will and worldwide recognition of the GOLDEN® and GOLDEN RICE™ trademarks.
57. Transgenic and gene splicing techniques used in creating Genetically Modified Organisms have been widely publicized in recent years. To date, there have been literally millions of words written about Genetically Modified foods, and many books can be found on the subject.
58. While the Defendant's "Golden Rice" has not been approved for human consumption to



date, Defendants hail it as a great step forward in prevention of blindness due to dietary deficiencies in Vitamin A consumption. Evaluation of these claims has revealed that an adult would need to consume approximately 20 pounds of “golden rice” in a single day to ingest sufficient Vitamin A precursor from ‘golden rice’.

59. Throughout the first part of this Century, there have been many developments in plant biology, and there are probably none as controversial as Genetically Modified foods. The Defendants are proposing the marketing and growing of a particular variety, namely “Golden Rice” which would be directed to the rice growing areas of Asia and other areas where Vitamin A deficiency is a health problem, perhaps hoping that acceptance of their Genetically Modified Rice will lead to greater acceptance of Genetically Modified foods in general.
60. While the Defendants tout the benefits of their rice, the press has a slightly different take on the matter, sometimes calling the Syngenta/Golden Rice Project’s Genetically Modified Rice as a hazard to human health. The Defendants “golden rice” has been labeled in the press as a “nutritional hoax”, and several books and publications such as the New York Times, refer to it as “The Great Yellow Hype”, or “The Great Yellow Hope”.
61. Defendants advertise and promote their rice as disease preventative, a pharmaceutical sort of food, where a prescribed amount of Vitamin A, not normally found in rice, can be eaten to prevent blindness caused by Vitamin A deficiency. But Defendants neglect to inform the public that a two year old child would have to consume 7 pounds of the rice per day, or that an adult would have to consume 20 pounds of “golden rice” per day.

Plus, nowhere in any of the Defendants literature or publications have there been any studies that assure all of the vitamin A in the rice would be converted to a bio-available form upon ingestion.

62. To date, there has been no long term safety testing of Genetically Modified food, using the actual proteins, and biochemical components obtained from the genetically modified food itself, or the actual rice that has been actually modified in a laboratory.
63. Studies have shown that components of the genetic material inserted into the genetic material of Genetically Modified Organisms can transfer into the cell nuclei of the organism eating the Genetically Modified food, forever changing the genetic code of those cells so affected. In addition, studies have shown that the genetic material of Genetically Modified Organisms, such as the Defendant's "Golden Rice", is not stable in subsequent generations, such as seed used from one season's planting for the following season's growing of food crops, such as rice.
64. The publicity surrounding the transgenic, Genetically Modified rice Defendants label as "golden rice", has caused confusion in the minds of customers and distributors of Golden Foods' GOLDEN® Rice lines. This confusion has resulted in lost sales, reduced sales and formerly robust demand for GOLDEN RICE™ to fall in some market areas.
65. In fact, the publicity concerning the Defendants "golden rice" has caused such severe doubts in the minds of some customers, so as to severely reduce the value of the Golden Foods GOLDEN® Rice marks totally valueless, based upon lost sales, and threats of claims for damage to customers from inclusion of untested "Frankenfood", (or food resulting from breeding two or more species that would not breed in nature, such as

cauliflower, crocus, and rice which is the genetic 'soup' used in Defendant's "Golden Rice").

66. Customers have complained to Golden Foods of illness they believe is directly attributable to their consumption of Genetically Modified Rice from the packages of Golden Foods' GOLDEN RICE.
67. All of the foregoing has placed Golden Foods into a bad position of false association with Genetically Modified food products due to the action of the Defendants, when the exact opposite is a principle of the Plaintiff company.
68. Thus, Defendants willful actions (1) have the likelihood of affecting interstate commerce by deceiving, confusing or damaging customer confidence in Golden Foods products throughout this Nation, and the entire worldwide marketplace where Golden Foods sells its rices; (2) constitute a false designation of origin of the Defendant's goods or services by passing them off as being associated with Golden Foods; (3) suggest a non-existent connection between the Defendants and Golden Foods; (4) suggest that Golden Foods has affiliated with, sponsored, licensed or approved of Defendant's goods, services, or businesses, (5) could cause the GOLDEN marks to become generic in the eyes of the general public and destroy the origin-identifying function of the GOLDEN marks, and/or (6) cause irreparable harm to the ongoing business, future business opportunities, and interfere with business relations between Golden Foods, its suppliers, distributors, customers and consumers, in relation to Golden Foods GOLDEN® rices, and Golden Foods GOLDEN RICE™; (7) destroy the good will, reputation, and consumer confidence in Golden Foods; (8) irretrievably remove the value of the mark GOLDEN RICE™ for all

future use by Golden Foods, and/or (9) irretrievably remove the value of the mark GOLDEN, for all future use by Golden Foods.

**FIRST CAUSE OF ACTION**  
**FEDERAL TRADEMARK INFRINGEMENT**

69. Golden Foods realleges and incorporates by reference herein the allegations of paragraphs 1 through 67, of this Complaint.
70. Defendant's aforementioned acts constitute trademark infringement in violation of the Lanham Act, 15 U.S.C. § 1114, et seq..
71. Golden Foods federal registration on the Principal Register for the mark GOLDEN, for its line of rices including GOLDEN® Rice Long Grain rice, GOLDEN® Rice Basmati rice, GOLDEN® Rice Short Grain rice, GOLDEN® Rice Par-Boiled rice, are conclusive evidence of Golden Foods' exclusive right to use these marks, pursuant to the Lanham Act, 15 U.S.C. § 1115. The registration is incontestible, which provides conclusive evidence of the validity of the registration. Golden Foods' ownership of the mark and exclusive right to use the mark in commerce in connection with the goods specified in the certificates of registration under 15 U.S.C. 1115(b).
72. Defendants wrongful use of the Golden Rice marks, including the misappropriation of the trademarks in domain names, indicates a thematic marketing strategy for promotion of their transgenic, Genetically Modified rice. This has caused, will cause, and is likely to cause in future, confusion as to the origin identifying function of trademarks, particularly the GOLDEN® and GOLDEN RICE™ trademarks. This confusion also extends to all rices marketed by Golden Foods under its GOLDEN® trademark.

73. As a proximate result of Defendants actions, Golden Foods has suffered and will continue to suffer great damage to its business, goodwill, reputation, profits and the strength of its trademarks. The injury to Golden Foods is and continues to be ongoing and irreparable. An award of monetary damages alone cannot fully compensate Golden Foods for its injuries and Golden Foods lacks an adequate remedy at law.
74. The foregoing acts of infringement have been, and continue to be, deliberate, willful and wanton, making this an exceptional case within the meaning of 15 U.S.C. § 1117.

**SECOND CAUSE OF ACTION**  
**FEDERAL UNFAIR COMPETITION, FALSE DESIGNATION OF ORIGIN**  
**PASSING OFF, AND FALSE ADVERTISING**

75. Golden Foods realleges and incorporates by reference herein the allegations contained in paragraphs 1 through 73 of the Complaint.
76. The GOLDEN and GOLDEN RICE marks as used by Golden Foods and its licensees, distributors, and marketers in connection with providing goods, namely rices and other foods, that are totally free from any contamination by, or mixing with, any transgenic, or Genetically Modified foods or food products. The marks are used in a distinctive manner, and have become associated with Golden Foods products, business and services.
77. Because of Defendants wrongful use of the GOLDEN RICE and GOLDEN trademarks, and it's appropriation of these marks for its entire line of transgenic and Genetically Modified Foods, namely rice, consumers and distributors and marketers are led to believe that the transgenic, Genetically Modified rice that is brightly yellow colored, originates with or is sponsored by or is otherwise approved of by Golden Foods, in violation of the Lanham Act. Alternatively, this designation will cause customers to believe that the

marks are generic, thus destroying the goodwill and value Golden Foods has built with the GOLDEN and GOLDEN RICE marks.

78. The foregoing acts and conduct by Defendants constitute false designation of origin, passing off and false advertising in connection with products and services distributed in interstate commerce, in violation of section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a).
79. Defendant's acts as set forth above, have caused irreparable injury to Golden Foods goodwill and reputation. The injury to Golden Foods is and continues to be ongoing and irreparable. An award of monetary damages alone cannot fully compensate Golden Foods for its injuries and Golden Foods lacks an adequate remedy at law.
80. Golden Foods is entitled to a permanent injunction against Defendant, as well as all other remedies under the Lanham Act, including, but not limited to, compensatory damages, treble damages, disgorgement of all profits, and costs and attorney's fees.

**THIRD CAUSE OF ACTION**  
**DILUTION OF FAMOUS MARKS**

81. Golden Foods realleges and incorporates by reference herein the allegations contained in paragraphs 1 through 79 of the Complaint.
82. Golden Foods' GOLDEN RICE marks are famous trademarks within the meaning of the Anti-Dilution Act, 15, U.S.C. § 1125(c).
83. Golden Foods has no control over the quality of the Golden Rice Project's, or over Syngenta's web sites, advertising, publications, marketing schemes, products, its use of the GOLDEN RICE trademarks, or its licensing procedures. As a result of such use by

the Defendants, the distinctive qualities of the GOLDEN RICE marks are being and will continue to be diluted.

84. Defendant's operation of its web sites, marketing schemes, publications, sales, licensing, testing, quality verification, or other matters of its business operations, is beyond the control or purview of Golden Foods. As a result of such use by the Defendants, the distinctive qualities of the GOLDEN RICE marks are being and will continue to be diluted.
85. Defendant's operation of its business developing and licensing its transgenic, Genetically Modified rice, and operation of web sites bearing the GOLDEN RICE marks in domain name form, will continue to dilute the distinctive nature of the GOLDEN RICE marks through blurring, in violation of 15 U.S.C. § 1125(c).
86. The Defendant's wrongful conduct constitutes an extreme threat to the distinctiveness of the GOLDEN RICE Marks that Golden Foods has expended great efforts to develop and maintain through its strict control over the decision to license usage of the GOLDEN RICE Marks.
87. The distinctive nature of the GOLDEN RICE Marks is of enormous value to Golden Foods, and Golden Foods will continue to suffer irreparable harm and blurring of the GOLDEN RICE Marks if Defendant's wrongful conduct is allowed to continue.
88. The Defendant's will likely continue to operate web sites, disseminate materials, publish articles in the popular, and peer reviewed press, conduct public relations campaigns, offer yellow transgenic Genetically Modified rice for sale or license, and otherwise continue to use the GOLDEN RICE marks unless enjoined by this Court.

89. Golden Foods is entitled to a preliminary and permanent injunction against the Defendants, as well as all other remedies available under the Lanham Act, including but not limited to, compensatory damages, treble damages, disgorgement of profits, and costs and attorney's fees.

**FOURTH CAUSE OF ACTION:**  
**FRAUDULENT MISAPPROPRIATION OF**  
**DOMAIN NAME, TRADEMARK AND TRADE NAME**

90. Plaintiff Golden Foods realleges and incorporates by reference herein the allegations contained in paragraphs 1 through 88 of the Complaint.s
91. Defendant Anthony Ruiz was and his company Universes Networks, was hired in mid-1999, as a consultant to Golden Foods for the purpose of establishing and hosting web sites under the web addresses of "goldenrice.com", and "goldenfood.com", for the Plaintiff.
92. Golden Foods established this web address as it was very important for its business.
93. For several years, Mr. Ruiz and his company did exactly what they were contracted to do. However, in 2001, without warning, Mr. Diaz suddenly stopped any work of maintaining the hosting of the above-mentioned goldenrice.com web address.
94. From about that time in 2001 to about 2006, there was no hosting of any company for the "goldenrice.com" web address, and despite efforts made by the Plaintiff, there was no information available regarding recovery of the domain name for the Plaintiff.
95. In April or May, 2006, The Golden Rice Project suddenly appeared as the owner of the



web address which was formerly the property of Golden Foods.

96. Demand letters to Mr. Diaz and to his company, as well as to the internet host company have gone unanswered.
97. As the web address became the property of Syngenta, along with the Golden Rice Project, Golden Foods believes that the web address was sold to the Defendants by fraudulent means, as Golden Foods did not, at any time, abandon the web address nor did Golden Foods consent to the sale of the web address to the Defendants, all of them, any of them, or some of them.

WHEREFORE, Golden Foods prays for judgment against the Defendants as follows:

1. That Defendants, their officers, agents servants, employees and attorneys, and those persons or entities in active concert or participation with the Defendants who receive actual notice of the court's order by personal service or otherwise, be permanently enjoined from:
  - a. using any of the GOLDEN RICE marks or any variation of "GOLDEN RICE", specifically including but not limited to, any term that includes "Golden" with rice, or any misspelling thereof, in connection with the promotion, marketing, advertising, public relations, and/or operation of any business practices or acts, in connection with selling transgenic, Genetically Modified rice, or any other rice or rice product, whether for human consumption, seed crops or other uses;
  - b. diluting, blurring, passing off or falsely designating the origin of the GOLDEN RICE marks, or GOLDEN in connection with rice, and from injuring Golden

Foods goodwill and reputation;

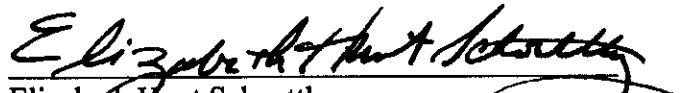
- c. doing any act or thing likely to induce the belief that the transgenic Genetically Modified rice of the Golden Rice Project, or of any such rice licensed, promoted or sold by Syngenta, or any other related business, service or product are in any way connected with, sponsored by, affiliated, licensed or endorsed by Golden Foods.
  - d. using any of the GOLDEN or GOLDEN RICE Marks for goods or services, on the Internet, or as domain names, email addresses, meta tags, invisible data, or otherwise engaging in acts or conduct that would cause confusion as to the source, sponsorship or affiliation of the Defendants with Golden Foods.
- 2. That Defendant, in accordance with 15 U.S.C. § 1116(A), be directed to file with this Court and serve upon Golden Foods, within 30 days after the service of the permanent injunction a report in writing under oath, setting forth in detail the manner and form, including future planned actions, by which Defendant has complied with the permanent injunction, and all actions and planned actions for ensuring future compliance with the permanent injunction;
  - 3. that Golden Foods recover its actual damages sustained as a result of Defendant's wrongful actions;
  - 4. That Golden Foods recover Defendant's profits made as a result of Defendant's wrongful actions;
  - 5. That Golden Foods recover three times Defendant's profits made as a result of Defendant's wrongful actions or three times Golden Foods damages, whichever is

greater;

6. For actual damages for interference with business, loss of business, paid by the Defendants to Golden Foods in excess of \$5 Million dollars.
7. That, in the event Golden Foods is forced to re-name and re-brand its products, the Defendants be charged with all costs of publicity and new trademark selection for the Golden Line of Rices including but not limited to GOLDEN rices and GOLDEN RICE.
8. That this case be deemed an exceptional case under 15 U.S.C. §§ 1117(a) and (b) and that Defendant be deemed liable for and ordered to reimburse Golden Foods for its reasonable attorneys' fees.
9. That Golden Foods be awarded exemplary damages for Defendant's willful and intentional acts;
10. That Golden Foods recover its costs, including Court costs; and,
11. That Golden Foods recover any and all such further relief to which it may be entitled.

Dated: May 20, 2009

Respectfully Submitted,

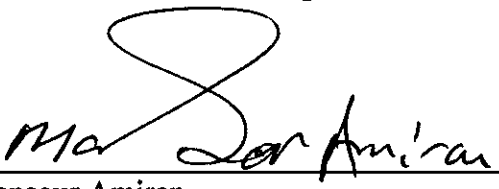
  
Elizabeth Hunt Schoettly  
LAW OFFICES OF ELIZABETH H. SCHOETTLY  
1355 West Estes Avenue, Suite L3  
Chicago, Illinois 60626  
Telephone: (773)761-4590

Counsel for Plaintiff

VERIFICATION

Mansour Amiran, under penalty of perjury of the laws of the United States, states: That he is President of International Golden Foods, Inc., an Illinois corporation, and that he has read, is familiar with, and has personal knowledge of the contents of the foregoing Verified Complaint; and that to the best of his knowledge, information and belief the allegations contained therein are true and correct.

Executed this 20 May, 2009, in  
Bensenville, Illinois.

  
\_\_\_\_\_  
Mansour Amiran

# **EXHIBIT A**



# Certificate of Registration

Whereas it appears from the sworn application of INTERNATIONAL GOLDEN FOODS, INC.  
(a corporation of the State of Illinois), located and doing business at 1121 Church Street, Evanston, Illinois 60201  
that said applicant has adopted and is using, within the State of Illinois, a certain Trade mark, which is  
described as follows: "GOLDEN RICE"

a specimen or facsimile of which mark, as currently used, is attached hereto, to-wit:

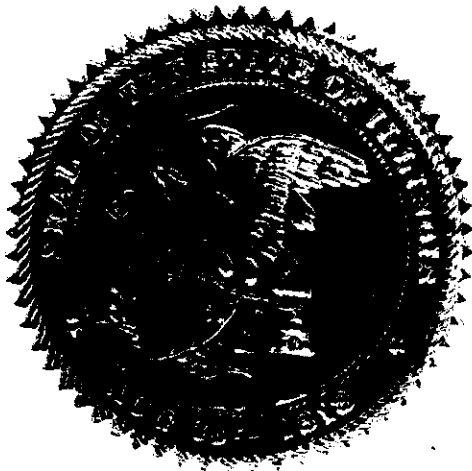
GOLDEN RICE

which mark was first used on October 1, 1986 and first used in the State of Illinois on October 1, 1986,  
and which mark is being used by said applicant to identify and distinguish the following rice.

in Class T-46, Foods and ingredients of foods.

Now, Therefore, this is to certify that the aforesaid application has been duly examined and said mark has been  
found to be registrable in accordance with the laws of this State:

Wherefore the said mark is hereby registered and recorded, as of this day, registration number 59123  
for a period of ten years from this date.



In Witness Whereof, I have hereunto set my hand and  
affixed the Great Seal of the State of Illinois, at the Capitol, in the  
City of Springfield, this 9th day of October,  
A.D. 1986.

Jim Edgar

Secretary of State

# **EXHIBIT B**

**Int. Cls.: 29 and 30**

**Prior U.S. Cl.: 46**

**Reg. No. 2,122,597**

**United States Patent and Trademark Office**

**Registered Dec. 23, 1997**

**TRADEMARK  
PRINCIPAL REGISTER**

**GOLDEN**

**INTERNATIONAL GOLDEN FOODS, INC. (IL-  
LINOIS CORPORATION)  
6340 GROSS POINT ROAD  
NILES, IL 60648**

**FOR: PICKLED HOT PEPPERS, PROCESSED  
EGG PLANTS, PROCESSED CUCUMBERS,  
CANNED VEGETABLES, FRUIT PRESERVES,  
JAMS, DRIED FRUITS, DRIED DATES, PROC-  
ESSED NUTS, PROCESSED PEAS, PROCESSED  
BEANS, PROCESSED CORN, IN CLASS 29 (U.S.  
CL. 46).**

**FIRST USE 7-1-1986; IN COMMERCE  
7-1-1986.**

**FOR: RICE, COFFEE, TEA, SUGAR, CAKES,  
PASTRIES, HONEY, SPICES, SAUCES AND  
PEPPER, IN CLASS 30 (U.S. CL. 46).**

**FIRST USE 7-1-1986; IN COMMERCE  
7-1-1986.**

**SER. NO. 74-374,854, FILED 4-2-1993.**

**CAROLYN GRAY, EXAMINING ATTORNEY**





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# GOLDEN

<b>Word Mark</b>	GOLDEN
<b>Goods and Services</b>	IC 029. US 046. G & S: PROCESSED BEANS; PREPARED MEALS CONSISTING PRIMARILY OF POULTRY AND BEANS; LENTILS, PROCESSED NUTS, PROCESSED, CANNED OR BOTTLED VEGETABLES, VEGETABLE OILS, PROCESSED DATES, PROCESSED EDIBLE SEEDS, PROCESSED COCONUT, DIPS, EXCLUDING SALSA and OTHER SAUCES USED AS DIPS; HUMMUS AND FALAFEL MIX. FIRST USE: 19860701. FIRST USE IN COMMERCE: 19860701
<b>Standard Characters Claimed</b>	
<b>Mark Drawing Code</b>	(4) STANDARD CHARACTER MARK
<b>Serial Number</b>	78821973
<b>Filing Date</b>	February 23, 2006
<b>Current Filing Basis</b>	1A
<b>Original Filing Basis</b>	1A
<b>Owner</b>	(APPLICANT) International Golden Foods, Inc. CORPORATION ILLINOIS 819 Industrial Drive Bensenville ILLINOIS 60106
<b>Attorney of Record</b>	Joseph T. Nabor
<b>Prior Registrations</b>	2122597
<b>Type of Mark</b>	TRADEMARK
<b>Register</b>	PRINCIPAL
<b>Live/Dead Indicator</b>	LIVE





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# GOLDEN

**Word Mark**  
**Goods and Services**

GOLDEN

IC 029, US 046, G & S: PROCESSED BEANS; PREPARED MEALS CONSISTING PRIMARILY OF POULTRY AND BEANS; LENTILS, PROCESSED NUTS, PROCESSED, CANNED OR BOTTLED VEGETABLES, VEGETABLE OILS, PROCESSED DATES, PROCESSED EDIBLE SEEDS, PROCESSED COCONUT, DIPS, EXCLUDING SALSA and OTHER SAUCES USED AS DIPS; HUMMUS AND FALAFEL MIX. FIRST USE: 19860701. FIRST USE IN COMMERCE: 19860701

**Standard Characters Claimed**

**Mark Drawing Code**

(4) STANDARD CHARACTER MARK

**Serial Number**

78821973

**Filing Date**

February 23, 2006

**Current Filing Basis**

1A

**Original Filing Basis**

1A

**Owner**

(APPLICANT) International Golden Foods, Inc. CORPORATION ILLINOIS 819 Industrial Drive Bensenville ILLINOIS 60106

**Attorney of Record**

Joseph T. Nabor

**Prior Registrations**

2122597

**Type of Mark**

TRADEMARK

**Register**

PRINCIPAL

**Live/Dead Indicator**

LIVE



# **EXHIBIT C**

**Int. Cls.: 29 and 30**

**Prior U.S. Cl.: 46**

**Reg. No. 2,122,597**

**United States Patent and Trademark Office**

**Registered Dec. 23, 1997**

**TRADEMARK  
PRINCIPAL REGISTER**

**GOLDEN**

**INTERNATIONAL GOLDEN FOODS, INC. (IL-  
LINOIS CORPORATION)  
6340 GROSS POINT ROAD  
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**FOR: PICKLED HOT PEPPERS, PROCESSED  
EGG PLANTS, PROCESSED CUCUMBERS,  
CANNED VEGETABLES, FRUIT PRESERVES,  
JAMS, DRIED FRUITS, DRIED DATES, PROC-  
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BEANS, PROCESSED CORN, IN CLASS 29 (U.S.  
CL. 46).**

**FIRST USE 7-1-1986; IN COMMERCE  
7-1-1986.**

**FOR: RICE, COFFEE, TEA, SUGAR, CAKES,  
PASTRIES, HONEY, SPICES, SAUCES AND  
PEPPER, IN CLASS 30 (U.S. CL. 46).**

**FIRST USE 7-1-1986; IN COMMERCE  
7-1-1986.**

**SER. NO. 74-374,854, FILED 4-2-1993.**

**CAROLYN GRAY, EXAMINING ATTORNEY**

# **EXHIBIT D**



# THE GOLDEN CHOICE

If you are in the market for a premier long grain, parboiled rice with exceptional taste and full-hearted delicate texture . . . GOLDEN RICE® is your optimum choice.

Our exclusive parboiled process preserves the grain's wholesome nutrients and enhances the naturally rich color and taste. No other rice performs with such perfection time and time again.

Make your choice GOLDEN RICE® and be assured that you are providing your customers with nature's ultimate parboiled rice.



P.O. Box 26875 Chicago, Illinois 60626  
1-800-343-RICE

# **EXHIBIT E**

HOME WHO WE ARE WHY HOW INFO CENTER

## News

### Researchers determine that *Golden Rice* is an effective source of vitamin A

Announcement by the preeminent professional organization for nutrition research, the American Society for Nutrition, about research that has demonstrated that the beta-carotene contained in *Golden Rice* is highly available to the human gut

Also, a press release by the Baylor College of Medicine, Houston, about another set of experiments that confirm the high bioavailability and effective bioconversion rate of the provitamin A contained in *Golden Rice*.

April 2009 Tufts Daily - Medford, MA, USA. Friedman researchers' ethics questioned for feeding children ...

### Reputed British scientists stand up for *Golden Rice*.

Scientists and Lord Taverne react to unwarranted attacks by die-hard luddites. And here is also what the *Golden Rice* management has to say about these attacks.  
April 2009

### Rockefeller Foundation to help *Golden Rice* obtain regulatory approval.

During her keynote speech at the World Food Prize's "Borlaug Dialogue" on 17 October 2008, the Foundation's president Judith Rodin announced that the Foundation would be providing funding to the International Rice Research Institute to shepherd *Golden Rice* through national, regulatory approval processes in Bangladesh, India, Indonesia, and the Philippines.

### Ingo Potrykus and Peter Beyer inspiring for scientists and many others

The coinventors of *Golden Rice* have been voted the most notable personalities in the areas of agricultural, environmental and industrial biotechnology by readers of Nature Biotechnology on the occasion of the journal's 10th anniversary.

### Ingo Potrykus among top living contributors to biotechnology

Ingo Potrykus named among the Top 100 living contributors to biotechnology in a poll conducted among peers by The Scientist and Reed Exhibitions.

### Grand Challenges In Global Health

## *Golden Rice* is part of the solution

### Biofortified rice as a contribution to the alleviation of life-threatening micronutrient deficiencies in developing countries

### A good start is a food start!

Dietary micronutrient deficiencies, such as the lack of vitamin A, iodine, iron or zinc, are a major source of morbidity (increased susceptibility to disease) and mortality worldwide. These deficiencies affect particularly children, impairing their immune systems and normal development, causing disease and ultimately death. The best way to avoid micronutrient deficiencies is by way of a varied diet, rich in vegetables, fruits and animal products.

The second best approach, especially for those who cannot afford a varied diet, is by way of nutrient-dense staple crops. Sweet potatoes, for example, are available as varieties that are either rich or poor in provitamin A. Those producing and accumulating provitamin A (orange-fleshed sweet potatoes) are called *biofortified\**, as opposed to the white-fleshed sweet potatoes, which do not accumulate provitamin A. In this case, what needs to be done is to introduce the biofortified varieties to people used to the white-fleshed varieties. Unfortunately, there are no natural provitamin A-containing rice varieties.

Rice plants produce  $\beta$ -carotene (provitamin A) in green tissues but not in the endosperm (the edible part of the seed). The outer coat of the dehusked grains—the so-called aleurone layer—contains a number of valuable nutrients, e.g. vitamin B and nutritious fats, but no provitamin A. These nutrients are lost with the bran fraction in the process of milling and polishing. While it would be desirable to keep those nutrients, the fatty component is affected by oxidative processes that make the grain turn rancid. Thus, unprocessed rice—also known as brown rice—is not apt for long-term storage.

Even though all required genes to produce provitamin A are present in the grain, some of them are turned off during development. In rice-based societies, the absence of  $\beta$ -carotene in rice grains manifests itself in a marked incidence of blindness, disease susceptibility and premature death of small children.

### The right to share in the benefits of science

Article 27 of the Universal Declaration of Human Rights states that

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to **share in scientific advancement** and its benefits.
2. Everyone has the right to the protection of the moral and material interests resulting from any **scientific**, literary or artistic production of which he is the author.



From 2005-2010 Peter Beyer, one of the inventors of *Golden Rice*, will be coordinating an international consortium that will develop biofortified rice capable of accumulating iron, zinc, high-quality protein and vitamin E in the grain. The project was granted to the University of Freiburg and is being funded under the Grand Challenges in Global Health Initiative of the Bill & Melinda Gates Foundation.

#### **New *Golden Rice* lines can cover daily vitamin A requirements**

In the April 2005 issue of *Nature Biotechnology* Syngenta scientists report a major break through in the development of a *Golden Rice* that will be able to supply the full recommended daily allowance of beta-carotene (provitamin A) to malnourished people in rice-based societies.

#### **Forty years ago one rice variety changed the face of agriculture across Asia.**

Read an article by Tom Hargrove and W. Ronnie Coffman about this remarkable story in rice breeding (Sept 2006).

#### **Dysfunctional EU regulatory system is sending the wrong message to countries in the South.**

According to Marc van Montagu, chairman of the International Plant Biotechnology Organization, the ambiguous position of the EU regarding transgenic crops is unnecessarily delaying access to needed technology in developing countries.

#### **Africa speaks up about drought, hunger and solutions to the problem.**

It's not about perceptions, it's about science-based decision making and solving real-life problems using appropriate technology. A subject of actuality in the light of the recent WTO decision on Europe's rejection to genetically modified crops. (by Temba Nuluthungu)

#### **Eurobarometer 2006.**

Improving, but still 59% of Europeans believe that tomatoes, and for that sake plants in general, do not contain DNA. It doesn't come as a surprise then that they would like to keep it that way. Hopefully, this website will contribute towards rising the knowledge base and awareness of what transgenic crops can do for humankind.

#### **Coming soon: *Golden Rice* webpage in Chinese**

□ □ □ □ □ □ □ □  
□ □ □ □ □ □ □ □ □ □ □ □

In 2008, 13.3 million farmers in 25 countries, 90 percent of them smallholders in less developed countries, were growing genetically modified crops on 125 million hectares, a number that has been constantly increasing for the last 12 years (see also ISAAA report).

«Damned if you do, damned if you don't»

That is the paradox situation faced by many scientists working to solve nutrition problems using Green Biotechnology. Critics of the technology often mention the lack of traits that address nutritional deficits in humans rather than those that are of more interest to farmers and seed companies. *Golden Rice* has often been criticised for not advancing faster in establishing its capacity to reduce vitamin A deficiency. Now, after years of thorough analytical work, the project is being criticised for risking lives by feeding humans with a genetically modified crop not yet approved for human consumption.

The shocking fact is that more than 10 million children under the age of five are dying every year. A high proportion of those children die victim of common diseases that could be avoided through a better nutrition. This number has been equated with a 'Nutritional Holocaust' (follow this link for the citation). Incredibly enough, these numbers are not bad enough to impress technophobes, who won't stop even for a moment to evaluate the potential of this technology to substantially reduce the number of children deaths. It has been calculated that the life of 25 percent of those children could be spared by providing them with crops biofortified with provitamin A (beta-carotene) and zinc.

### **Quantum leap: *Golden Rice* accumulates provitamin A (β-carotene) in the grain**

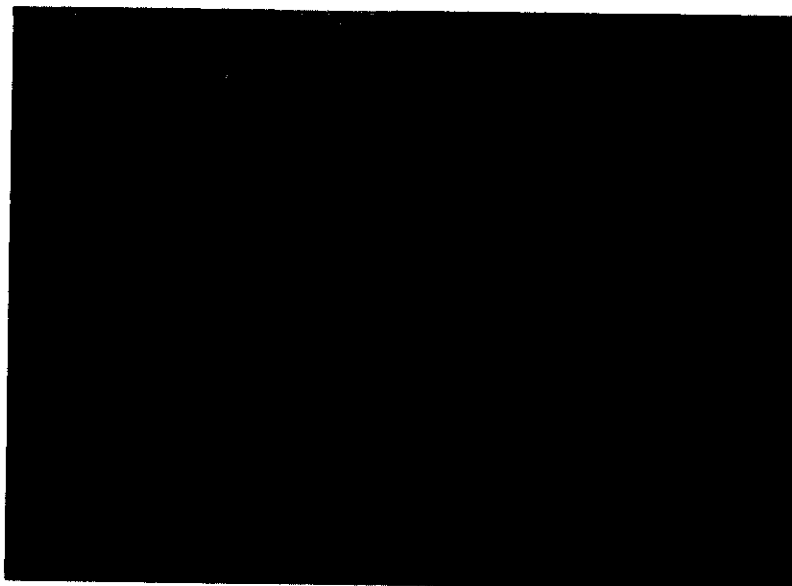
In *Golden Rice* two genes have been inserted into the rice genome by genetic engineering, to account for the turned-off genes. This intervention leads in turn to the production and accumulation of β-carotene in the grains. The intensity of the golden colour is an indicator of the concentration of β-carotene in the endosperm.

Since a prototype *Golden Rice* was developed in 1999, new lines with higher β-carotene content have been generated. Our goal is to be capable of providing the recommended daily allowance of vitamin A—in the form of β-carotene—in 100-200 g of rice, which corresponds to the daily rice consumption of children in rice-based societies, such as India, Vietnam or Bangladesh. In other countries, *Golden Rice* could still be a valuable complement to children's diets, thus contributing to the reduction of clinical and sub-clinical vitamin A deficiency-related diseases.

According to the World Health Organization, dietary vitamin A deficiency (VAD) causes some 250,000 to 500,000 children to go blind each year. Blindness and corneal afflictions are but indicators of more severe underlying health problems: more than half the children who lose their sight die within a year of becoming blind. VAD compromises the immune systems of approximately 40 percent of children under the age of five in the developing world, greatly increasing the risk of severe illnesses from common childhood infections.

In the most remote rural areas *Golden Rice* could constitute a major contribution towards sustainable vitamin A delivery mechanisms. To achieve this goal a strong, concerted, and interdisciplinary effort is needed. This effort must include scientists, breeders, farmers, regulators, policy-makers and extensionists. The latter will play a central role in educating farmers and consumers as to their options. While the most desirable option would be a varied and sufficient diet, this goal is not always achievable, at least not in the short term. The reasons are manifold, ranging from tradition to

geographical and economical limitations. *Golden Rice* is a step in the right direction in that it does not create new dependencies or displace traditional cuisine.



*Golden Rice* grains are easily recognisable by their yellow to orange colour, the stronger the colour the more  $\beta$ -carotene. While a yellow rice is still unfamiliar to most of us, it is hoped that the pleasant colour will help promote its adoption. Would you believe that once upon a time carrots were white or purple? Orange-coloured carrots are the product of a mutation selected by a Dutch horticulturist a few hundred years ago because it was the colour of the Dutch Royal House of Orange-Nassau!

### ***Golden Rice* will reach those who need it at no additional cost**

Those who need the product of this new technology most are those who can least afford buying a mixed diet, rich in essential nutrients. This has been taken into consideration by the creators of *Golden Rice* technology, Professors Peter Beyer and Ingo Potrykus, and the crop protection company Syngenta, who have donated it for humanitarian use in developing countries, free of charge.

The *Golden Rice* Humanitarian Board encourages further research to determine how the technology may play a part in the ongoing global effort to fight VAD in poor countries. While *Golden Rice* is an exciting development, it is important to keep in mind that malnutrition is to a great extent rooted in political, economic and cultural issues that will not be solved by a technical fix. Yet *Golden Rice* offers people in developing countries a valuable and affordable choice in the fight against malnutrition.

This site is maintained by the *Golden Rice* Humanitarian Board for the purpose of providing information on the background and progress of the *Golden Rice* Humanitarian Project.

### **Eat orange!\***

\*Welch RM and Graham RD (2004) Breeding for micronutrients in staple food crops from a human nutrition perspective. *J Exp Bot* 55:353-364.

\*Eat orange! A motto being promoted by HarvestPlus, and which we fully support.

*Golden Rice* Humanitarian Board © 2009